

Analyzing and Visualizing Cisco Network Device Configurations



Project Title	Analyzing and Visualizing Cisco Network Device Configurations
Project Summary	Design and develop an application to parse Cisco device configuration files and create a visual representation of the device configuration(s).
Country	United States

Project Description

Support Department of Defense Red Team operators by creating network reconnaissance tools for use during cooperative penetration testing engagements.

This project involves developing computer code to create a tool that will parse the configuration of Cisco routers and switches, and Adaptive Security Appliances (ASA). Parsed data will then be converted to a visual representation of the Cisco device configuration details. Key items of interest to be displayed include:

- User accounts and password encryption schemes
- Interface descriptions with associated IP schemes, VLAN info, and applied Access Control Lists (ACL)
- Graphical representation of ACLs - A map of which ports are permitted/denied into which interfaces
- VTY settings

Required Skills or Interests

Skill(s)

Coding

Data analysis

Data visualization

Additional Information

Knowledge of networking fundamentals and Cisco IOS a bonus but not required.

Language Requirements

None